Architecture Diagram

conv1 =
nn.Conv2d(3, 10, 3)

pool =
nn.MaxPool2d(2, 2)

conv2 =
nn.Conv2d(10, 20, 5, padding=2)

conv1 =
nn.MaxPool2d(2, 2)
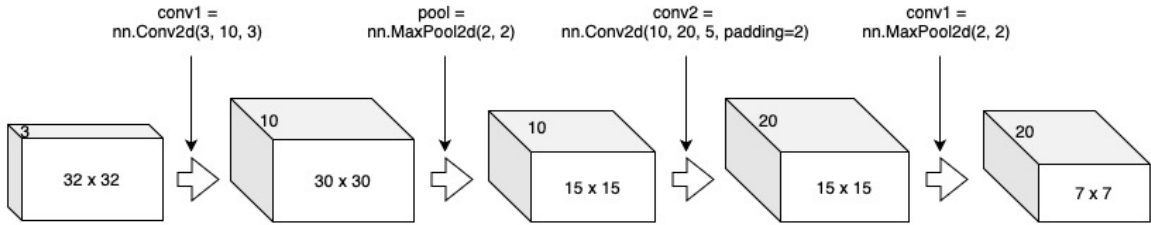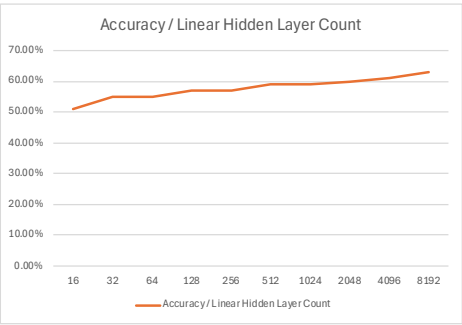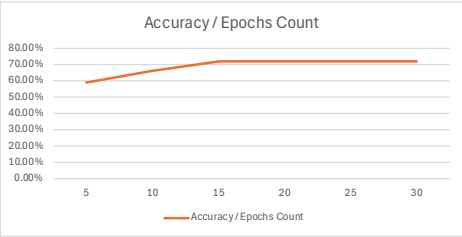
Testing impact of linear hidden layer count

Number of Linear Hidden Layer	Number of Parameters	Number of Epochs	Time Taken for Training (HH:MM:SS)	Overall Accuracy (%)
16	13496	5	0:00:57	51.00%
32	37022	5	0:01:00	55.00%
64	68734	5	0:00:54	55.00%
128	132158	5	0:00:55	57.00%
256	259006	5	0:01:02	57.00%
512	512702	5	0:00:58	59.00%
1024	1020094	5	0:01:01	59.00%
2048	2034878	5	0:01:14	60.00%
4096	4064446	5	0:01:37	61.00%
8192	8123582	5	0:02:12	63.00%

Accuracy / Linear Hidden Layer Count

Testing impact epochs count

Number of Linear Hidden Layer	Number of Parameters	Number of Epochs	Time Taken for Training (HH:MM:SS)	Overall Accuracy (%)
512	512702	5	0:00:58	59.00%
512	512702	10	0:02:13	66.00%
512	512702	15	0:03:14	72.00%
512	512702	20	0:04:13	72.00%
512	512702	25	0:05:22	72.00%
512	512702	30	0:06:46	72.00%

Accuracy / Epochs Count

What Helps?

It seems like increasing number of epochs and number of linear hidden layer helps. However, you can easily see the diminish of return after a while.